



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Yuji KUWABARA et al.

Serial No.: 10/529,550

Group Art Unit: 1794

Filed: March 29, 2005

Examiner: Carolyn Paden

For: DRY FRACTIONATION METHOD FOR FAT

DECLARATION UNDER RULE 1.132

Honorable Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Sir:

I, Koichi KURAMORI, citizen of Japan declare and say that:

1. I was graduated from Miyazaki University, Graduate School of Agricultural Chemistry in March 1990.

2. Since April, 1990 up to this time, I have been an employee of Fuji Oil Company Limited, the assignee of the above-identified application. From April, 1990 to March, 2000, I was engaged in research and development work in Research Laboratories of said company. From April, 2000 to this time, I have been engaged as a technical staff of Oils & Fats Processed Food Division of said company and, at present, I am a manager of Chocolate Development Department of said division.

3. I am one of the inventors of the above-identified application and am familiar with the subject matter thereof.

4. I have read the Office Action mailed May 5, 2008 and the references cited therein and am familiar with the subject matter thereof.

5. In order to show the unexpected results of the

temperature raising treatment of the dry fractionation method claimed in the above-identified application, Examples and Comparative Examples disclosed in the specification are summarized in the following tables.

Table 1.1 Fractionation Conditions

		Fats	Fractionation	Cooling	Raising
Example	1	isomerization	dry	25°C	45°C
Comparative Examples	1	hydrogenated palm oil	solvent	-23°C	
	2			-19°C	
	3		dry	20°C	no

Table 1.2 Evaluation

		Evaluation	Results of a)	Results of b)
Example	1	a) comparison of	much mid fraction	meltability ◎
Comparative Examples	1	contents of low, mid, high m.p. parts in	contamination of high m.p. fraction	meltability Δ
	2	mid-fraction b)		meltability ○
	3	meltability in mouth & anti-blooming of chocolate	insufficient solid/liquid separation	meltability Δ

Table 2.1 Fractionation Conditions

		Fats	Fractionatio n	cooling	Raisin g
Examples	2	1,3-inter- esterificatio n	dry	23°C solidifi - cation	43°C
	3				40.5°C
	4				44.5°C
Comparativ e	4	oil of ethyl stearate and high oleic sunflower oil			39°C
	5				46°C
Examples	8			complete melting	39°C

Table 2.2 Evaluation

		Evaluation	Results of a)	Results of b)
Examples	2	a) contents of diglycerides in	decrease in SS & SSS	chew feeling & meltability ◎

Comparative Examples	3	liquid fraction b) chew feeling & meltability in mouth of chocolate	decrease in SS & SSS	chew feeling & meltability ○
	4		decrease in SS & SSS	chew feeling & meltability ○
	4		not separated	
	5		contamination of SS & SSS	chew feeling △ meltability ×
	8		not separated	

Table 3.1 Fractionation Conditions

		Fats	Fractionation	cooling	Raising
Examples	5	PMF	dry	cooling solidification	29°C
	6				29.1°C
	7				30°C
Comparative Examples	6				26.5°C
	7				30.7°C

Table 3.2 Evaluation

		Evaluation	Results
Examples	5	comparison of contents of PPP & POP in liquid fraction	less contamination of PPP & high POP content
	6		less contamination of PPP & high POP content
	7		less contamination of PPP & high POP content
Comparative Examples	6		lowering of POP content
	7		contamination of PPP

In the above tables, the shaded parts correspond to Examples of the claimed invention of the above-identified application.

As seen from the above tables, the fractionated products obtained by Examples provide excellent results as compared with the product of Comparative Examples.

6. I declare further that all statements made herein of my own knowledge are believed to be true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the above-identified application or any patent issuing thereon.

This 24th day of July, 2008

Koichi Kuramori

Koichi KURAMORI